

The New European Landscape for Electricity

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Maximising the Availability of Transmission Capacity and Improving Transparency



Peter Styles, Chairman, EFET Electricity Committee

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- Comments on EU congestion management guidelines under Regulation 2003/1228
- The importance of information transparency
- EFET proposal to maximise available capacity and make allocations firm



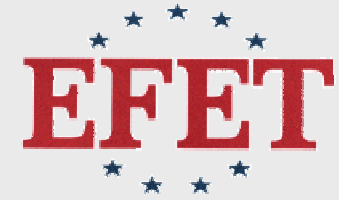
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EU Regulation on Cross Border Electricity 2003/1228 (1)



- Market based solutions for congestion
- Efficient economic signals
- Maximum capacity to be made available and “as firm as possible”
- Netting of predicted flows and of schedules
- TSOs to be compensated for costs they incur

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EU Regulation on Cross Border Electricity 2003/1228 (2)



- **TSOs must use auction revenues for**
 - Guaranteeing availability of allocated capacity
 - Network investments
 - Reimbursement to grid users

Article 9

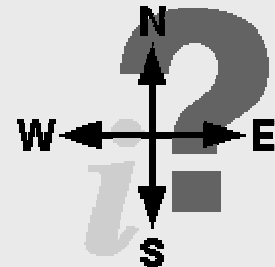
“The regulatory authorities (...) shall ensure compliance with this regulation and the guidelines adopted. Where appropriate to fulfil the aims of this Regulation they shall co-operate between each other and with the Commission.”



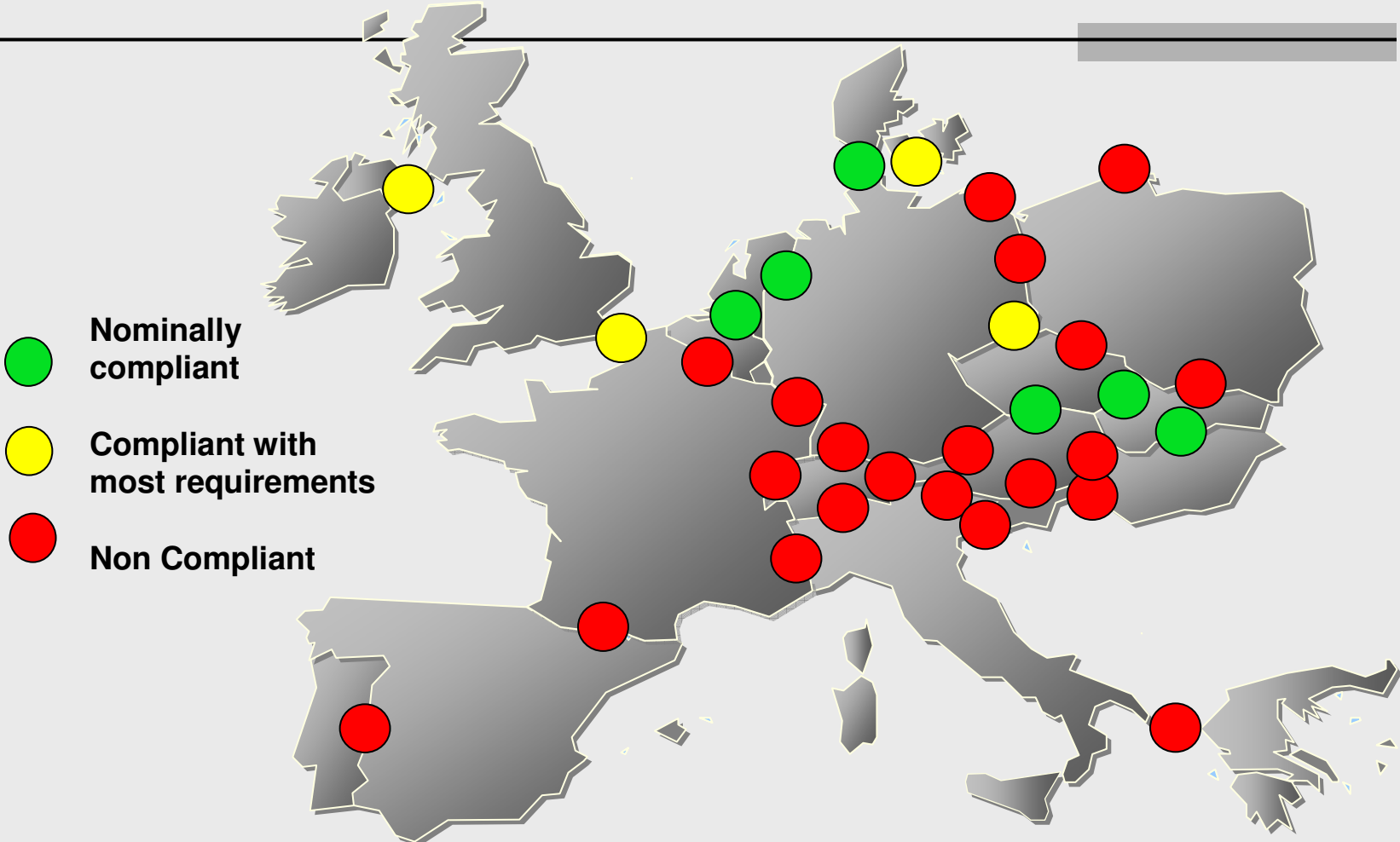
Regulation 2003/1228 : Existing Guidelines



- Short-run congestions must be solved in a market-based, economically efficient manner
- Congestion management methods must provide signals or incentives for efficient network and generation investment
- Price signals which emerge from congestion management procedures should be directional
- TSOs should offer transmission capacity which is as firm as possible
- Congestion management procedures with significant effects on power flows in other networks may not be devised unilaterally



Extent of compliance with Regulation 2003/1228



Source: Barclays Capital / EFET analysis

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New EU Congestion Management Guidelines (1)



- **Separate Security and Reliability Guidelines might weaken the Congestion guidelines (e.g. contradictions for maximising capacity?)**
 - EFET: All aspects to be considered in both

- **The proposed “market operation timetable” reduced flexibility and increased market risk**
 - EFET: Shorten the timetable to one day, and envisage intra-day solutions

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New EU Congestion Management Guidelines (2)



- **Guidelines were framed for co-ordination between just two adjacent TSOs, but:**
 - Many interconnections suffer loop- or counter-flows affecting several borders
 - Congestion may be initiated by third country dispatch or demand changes, not commercial transactions
 - Non-EU borders such as those with Switzerland should be taken into account

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New EU Congestion Management Guidelines (3)



- **Intra-day use of capacity was described in draft as an option, not obligation**
 - EFET proposed intra-day access using remaining cross border capacity not allocated by day-ahead
 - EFET proposed seamless integration of balancing markets, with cross-border bidding

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New EU Congestion Management Guidelines (4)



- **Accurate calculation of the D-1 available capacity is only possible when generation information is available to all TSOs**
 - **EFET: Guidelines are needed to define the required generation data transparency for accurate calculation among TSOs**
 - *ERGEG now envisages such a Guideline for implementation by end of 2006*

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Need for transparency of data about use of infrastructure



- In a competitive market price is a function of the supply and demand balance
- Spot prices impact front products (W+1, M+1)
- Informational advantages to incumbent players result in potential for barriers to market entry
- Trading is a zero sum game, where any structural advantage will deter new entrants

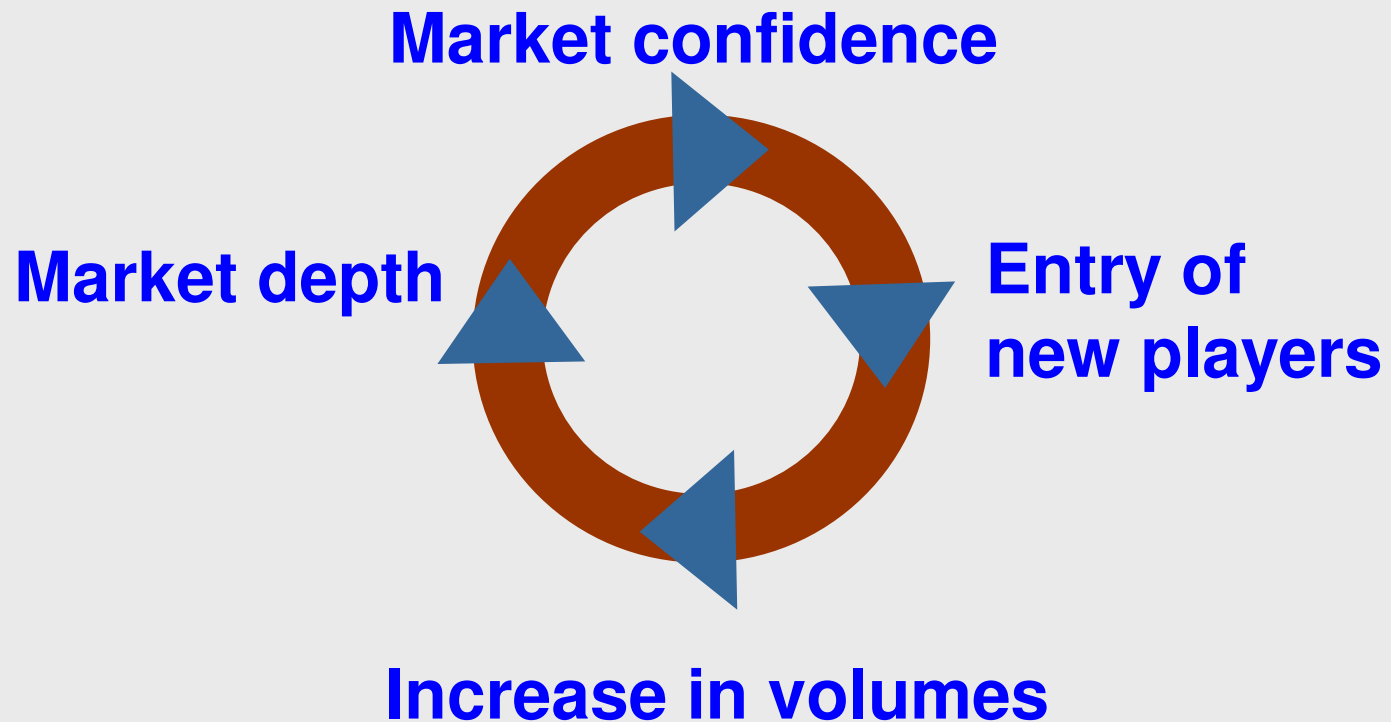
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Transparency stimulates market entry



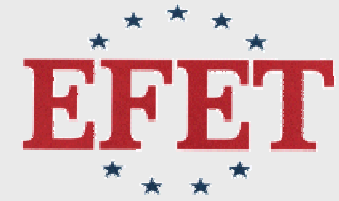
Data transparency

- Ability to explain prices
- Forecasting



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Who should be interested in information transparency?



- **System operators**
 - Need to exchange network and dispatch data
- **Regulators**
 - Workable wholesale market as pre-condition for competition at retail level
- **Power exchanges**
 - Generation data stimulates liquidity, facilitates surveillance
- **Wholesale players**
 - Liquidity eases market entry and enables professional risk management

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Transparency in selected countries



	France	Belgium	Netherlands	Scandinavia	Germany
Load (D+1)	✓	✓		✓	✓*
X-Border (NTC & ATC; flows D+1, Y-1)	✓	✓	✓	✓	
Balancing (costs D+1)	✓	✓	✓	✓	✓*
Generation (current & historic)			✓	✓	
Market messages (e.g. outages)				✓	

*Delivered significantly later



Why has transparency not developed?



- Focus of regulatory discussion so far on transmission tariffs and retail
- Distrust between national system operators and on the part of generators
- Importance of wholesale trading ignored by some regulators and governments

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Transparency: What needs to happen ?



- Regulators take ownership of framework for wholesale market
- **System operators release to each other and to wholesale market participants comprehensive data on**
 - Load
 - Cross border capacity (*ex ante*) and flows
 - Generation (planned dispatch, outages and *ex post*)

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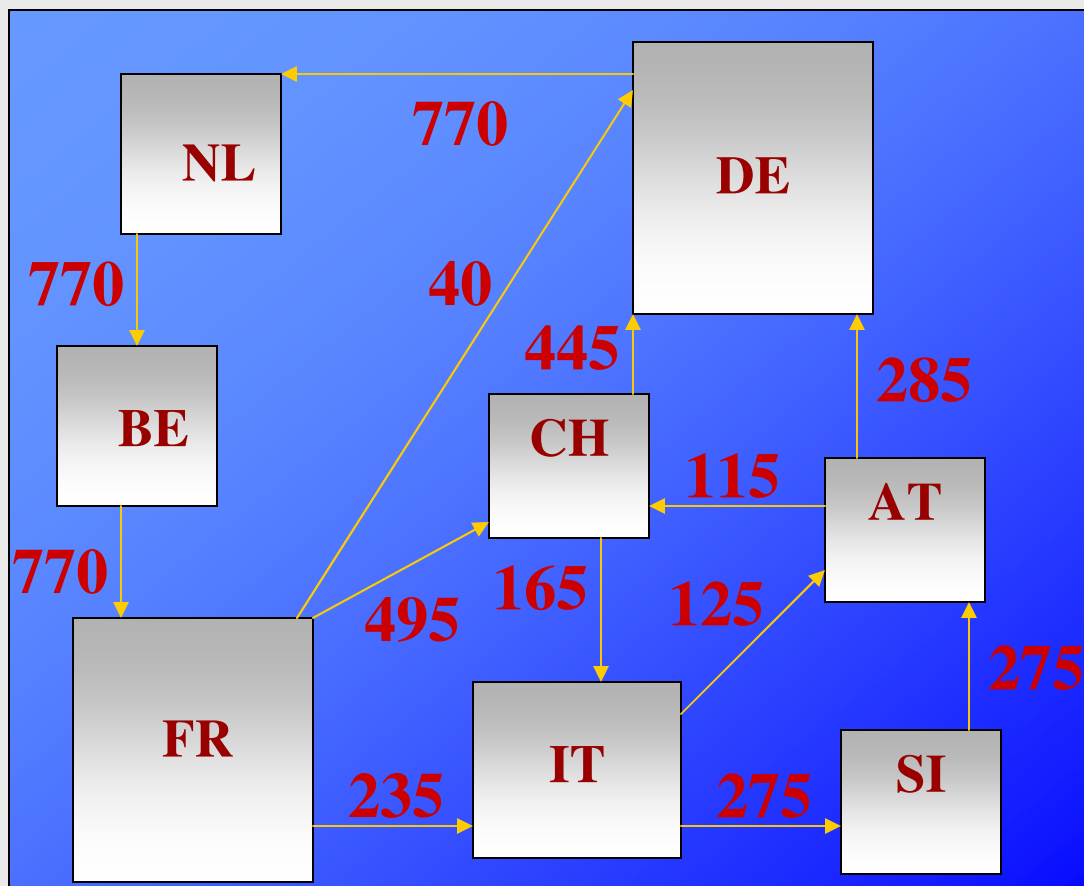
Flows through Europe with all countries in balance



Values in capacity
(MW)

Commercially
Export/Import=Zero

(Source : ELIA users'
work group on
interconnections, April
2002)



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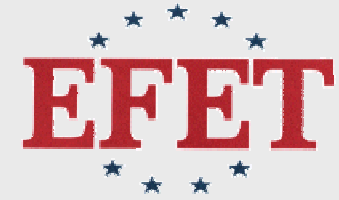
EFET Proposal to Maximise Allocated Capacity (1)



- Currently “bottom-up allocation”: Worst or most conservative case determination of capacity, with actual capacity going to short-term allocations
- EFET Proposal:
 - “Top down allocation”: TSOs allocate rights to the maximum likely values of available capacity and buy back from users at times when the system requires reduction of the amount allocated
 - Divorce of security criteria from allocation amount

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EFET Proposal to Maximise Allocated Capacity (2)



- **Requires more accurate prediction of the available capacity**
 - Closer co-operation between TSOs
 - Extension towards hourly based load flow predictions and use of PTDFs
 - More data exchange between TSOs (ex post and ex ante)



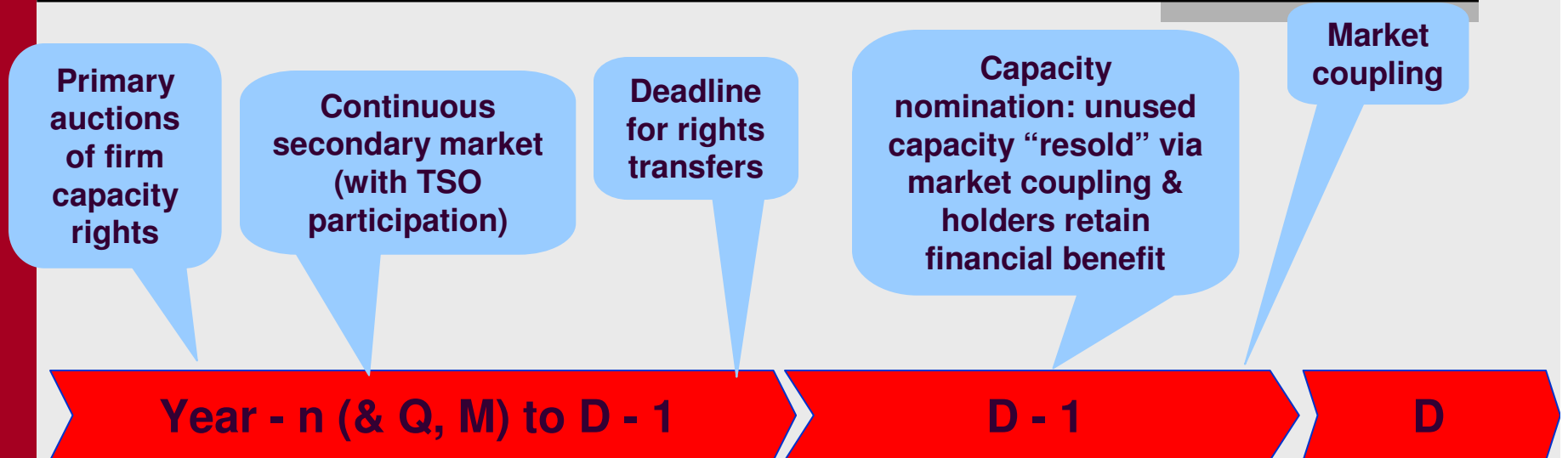
EFET Proposal to Maximise Allocated Capacity (3)



- **Requires market based system for buying back cross-border capacity if initially over-allocated**
- **Requires incentives for TSOs**
 - Sales income (partly) used for a “buy back” fund
 - Fund used to “buy back” capacity according to market price impacts
 - (Part of) “buy back” fund may be kept by TSO

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Capacity allocation with also day-ahead implicit auctions



- Ability for traders to hedge basis risk 100%
- Secondary market allows capacity rights to be transferred
- Automatic reallocation of unused capacity day-ahead promotes efficient dispatch and prevents hoarding

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Capacity rights transactions and payments

